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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 10/754,564 Filing Date: January 12, 2004

Appellant(s): OLOFSSON ET AL.

AUG 14 2006

**GROUP 3600** 

Thomas P. Pavelko
For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 6/8/2006 appealing from the Office action mailed 10/20/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner:

Rejection of claim 18 under 35 U.S.C. §112, first paragraph.

The examiner notes appellant's insistence that the term "below" must be read very broadly (page 11 of the appellant's Appeal Brief) such that it merely denotes depth and not necessarily horizontal under-positioning. This broad interpretation is now equally applicable to the prior art rejections maintained in this examiner's answer below.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

5,165,816	Parasin	11-1992
5,797,237	Finkell	8-1998

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14, 15 and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parasin (U.S. Patent 5,165,816) in view of Finkell (U.S. Patent 5,797,237).

Claim 14. Parasin discloses (figs. 1 and 2) a joint formed at a junction between adjacent boards, the joint comprising: a first board (10), comprising an upper surface (upper surface of 10), a lower surface (lower surface of 10) and a groove (32, 35, 37); a second board (11) jointed to the first board, and comprising an upper surface (upper surface of 11), a lower surface (lower surface of 11) and a tongue (16, 20, 24) a first equalizing cavity (upper 46) located adjacent to an upper end of a proximal end (24) of the tongue below the upper surfaces; wherein a distal end (16) of the tongue is smaller than a proximal end (32) of the groove; a second equalizing cavity (bottom 42), formed by a gap between the proximal end (32) of the groove and the distal end of

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the tongue; and further comprising glue (col.3, ll.15-20) disposed in at least one of the first equalizing cavity and the second equalizing cavity. Parasin does not disclose that the upper surfaces abut. Finkell teaches (fig.2 and col.4, ll.30-35) that upper surfaces of floorboards should abut. One of ordinary skill in the art would have readily recognized that non-abutting floorboards present a greater trip hazard than do abutting floorboards, since abutting boards present no space for pedestrians' shoes to catch. It is further readily apparent that gaps between adjacent floorboards would catch/trap dirt making such flooring harder to clean, which is undesirable. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the Parasin upper surfaces to abut one another, for the purpose of decreasing trip hazards, eliminating dirt-trapping gaps, and creating a more desirable aesthetic appearance.

Claim 15. Parasin discloses (figs. 1 and 2) a joint formed at a junction between adjacent boards, the joint comprising: a first board (10), comprising an upper surface (upper surface of 10), a lower surface (lower surface of 10) and a groove (32, 35, 37); a second board (11) joined to the first board, and comprising an upper surface (upper surface of 11), a lower surface (lower surface of 11), a tongue (16, 20, 24), a first equalizing cavity (upper 46) located adjacent to an upper end of a proximal end (24) of the tongue below the upper surfaces wherein a distal end (16) of the tongue is smaller than a proximal end (32) of the groove; a second equalizing cavity (lower 42, 44, 46), formed by a gap (at lower 42) between the proximal end of the groove and the distal end of the tongue, wherein at least one of the first equalizing cavity and the second equalizing cavity extends to the lower surface (where lower 42, 44, 46 meets the lower surface of 11) of the second board. Parasin does not disclose that the upper surfaces abut. Finkell teaches

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(fig.2 and col.4, ll.30-35) that upper surfaces of floorboards should abut. One of ordinary skill in the art would have readily recognized that non-abutting floorboards present a greater trip hazard than do abutting floorboards, since abutting boards present no space for pedestrians' shoes to catch. It is further readily apparent that gaps between adjacent floorboards would catch/trap dirt making such flooring harder to clean, which is undesirable. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the Parasin upper surfaces to abut one another, for the purpose of decreasing trip hazards, eliminating dirt-trapping gaps, and creating a more desirable aesthetic appearance.

Claim 17. Parasin discloses (figs.1 and 2) a joint formed at a junction between adjacent boards, the joint comprising: a first board (10), comprising an upper surface (upper surface of 10), a lower surface (lower surface of 10) and a groove (32, 35, 37), a second board (11) jointed to the first board, and comprising an upper surface (upper surface of 11), a lower surface (lower surface of 11), a tongue (16, 20, 24), a first equalizing cavity (upper 46) located adjacent to an upper end of a proximal end (24) of the tongue below the upper surfaces, wherein a distal end (16) of the tongue is smaller than a proximal end of the groove (32); a second equalizing cavity (lower 42), formed by a gap between the proximal end of the groove and the distal end of the tongue, wherein the tongue comprises at least one guiding wedge (top 17 and bottom 17) on an upper surface (upper 22) or a lower surface (lower 22) thereof, whereby the at least one guiding wedge contacts (where 17 meets 33 near 34) an inner surface of the groove. Note that element (18) could also be interpreted as the upper surface. Parasin does not disclose that the upper surfaces abut. Finkell teaches (fig.2 and col.4, ll.30-35) that upper surfaces of floorboards should abut. One of ordinary skill in the art would have readily recognized that non-abutting

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floorboards present a greater trip hazard than do abutting floorboards, since abutting boards present no space for pedestrians' shoes to catch. It is further readily apparent that gaps between adjacent floorboards would catch/trap dirt making such flooring harder to clean, which is undesirable. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the Parasin upper surfaces to abut one another, for the purpose of decreasing trip hazards, eliminating dirt-trapping gaps, and creating a more desirable aesthetic appearance.

Claim 18. Parasin discloses (figs. 1 and 2) a joint formed at a junction between adjacent board, the joint comprising: a first board (10), comprising an upper surface (upper surface of 10), a lower surface (lower surface of 10) and a groove (32, 35, 37); a second board (11) joined to the first board, and comprising an upper surface (upper surface of 11), a lower surface (lower surface of 11), and a tongue (16, 20, 24); and the first board and said second board defining a gap (lower gap between 10 and 11 extending through 42 up to, but not including, 44) therebetween; and a hole (bottom 44, bottom 46), in fluid communication (col.3, ll. 15-20) with the gap, the hole having an opening (opening at bottom of bottom 46) below the groove (in as much as the applicant's hole 7 is below groove 1 as seen in figures 7 and 8). Parasin does not disclose that the upper surfaces abut. Finkell teaches (fig.2 and col.4, ll.30-35) that upper surfaces of floorboards should abut. One of ordinary skill in the art would have readily recognized that nonabutting floorboards present a greater trip hazard than do abutting floorboards, since abutting boards present no space for pedestrians' shoes to catch. It is further readily apparent that gaps between adjacent floorboards would catch/trap dirt making such flooring harder to clean, which is undesirable. Therefore, it would have been obvious to one with ordinary skill in the art at the

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time the invention was made to modify the Parasin upper surfaces to abut one another, for the purpose of decreasing trip hazards, eliminating dirt-trapping gaps, and creating a more desirable aesthetic appearance.

Claim 19. Parasin discloses that the hole extends from the joint towards a proximal section of the first and second board (section of first and second board proximal to the bottom surface).

Claim 20. Parasin discloses that the hole extends towards the lower surface of the first or second board.

Claim 21. Parasin discloses that the hole (bottom 44, bottom 46) is a vent through one of the boards (in that 44 extends through a portion of board 10).

Claim 22. Parasin discloses that the vent has a terminal end (bottom end of 46) at the lower surface of the board.

Claim 23. Parasin discloses a method for assembling floor boards to form a joint therebetween, the method comprising: providing: a first board (10), the first board comprising an upper surface (upper surface of 10), a lower surface (lower surface of 10) and a groove (32, 35, 37); a second board (11) jointed to the first board, and comprising an upper surface (upper surface of 11), a lower surface (lower surface of 11), and a tongue (16, 20, 24); and glue (col.3, ll.15-20), disposed on at least one of the tongue and the groove; mating the groove of the first board with the tongue of the second board; and directing the glue away form the upper surface and towards the lower surface of the boards (through bottom 42 and bottom 46).

#### (10) Response to Argument

Regarding claims 14, 15 and 17,

The appellant argues that element 46 of Parasin is not located below the upper surface of abutting boards but rather is a space therebetween. This is not persuasive. While element 46 is a cavity that is located between the boards, it is also located at a depth lower than the upper surface of the boards such that it is below the upper surface within the broadest reasonable interpretation of the claim language. Applicant's remarks (see page 11 of Appeal Brief filed 6/8/2006) clearly indicate that the term "below" is not meant to indicate only relative depth regardless of horizontal location. Note that the applicant's claims also reflect this interpretation by reciting that hole (7) has an opening below groove (1) even though figures 7 and 8 depict hole (7) as being to the right of groove (1).

The appellant argues that element (18) of Parasin is the "distal end of the tongue" rather than element (18), presumably since the applicant feels that the "end" must consist only of a the end surface. This is not persuasive. Element (16) of Parasin is and "end" in that it is "the terminal unit of something spatial that is marked off by units" in accordance with Merriam-Webster's Collegiate Dictionary Tenth Edition. Furthermore of the three tongue units (16, 20, 24) element (16) is the most distal, thereby rendering the examiner's interpretation of element (16) as the "distal end of the tongue" very reasonable. If the applicant truly wishes to narrow the scope of the claim to require the limitation "end" only to include units that are surfaces then the claim must be amended accordingly.

The appellant argues that element (bottom 42) of Parasin is not a gap formed between the proximal end of the groove and distal end of the tongue and therefore cannot be the "second equalizing cavity". This is not persuasive. As clearly seen in figure 2 of Parasin, element

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(bottom 42) is between the proximal end (32) of the groove (32, 35, 37) and the distal end of the tongue (16), and therefore can reasonably be referred to as the "second equalizing cavity".

The appellant argues that there is not motivation to combine Parasin with Finkell. This is not persuasive. As stated in the rejection above, motivation to combine comes from ordinary skill in the art since one of ordinary skill in the art would have readily recognized that non-abutting floorboards present a greater trip hazard than do abutting floorboards, since abutting boards present no space for pedestrians' shoes to catch; and further since it is further readily apparent that gaps between adjacent floorboards would catch/trap dirt making such flooring harder to clean, which is undesirable.

The appellant argues that modifying the upper surfaces of Parasin to abut, as taught by Finkell, would necessarily destroy the Parasin gap. This is not persuasive. Not only is it well within ordinary skill in the art to modify the Parasin upper surfaces to abut without modifying the gap underneath, but note that the upper surfaces of Finkell abut with gaps there under such that no such gap destruction is even suggested, much less necessary. The examiner notes that Finkell does state that the size of the gap can be reduced (col.6, ll.60-65) but no mention of destroying the gap all together is mentioned. The fact that the gaps/cavities of Finkell are not in the exact same position as those of Parasin does not detract from the desirability of abutting upper surfaces. In fact the applicant's argument that the Parasin gap must be destroyed to incorporate the Finkell abutting upper surfaces amounts to an argument of "bodily incorporation" for which Patent Office policy is very clear. Specifically, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the

references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Lastly, in an obviousness assessment, skill is presumed on the part of the artisan, rather than the lack thereof. In re Sovish, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985). It is inconceivable that a person of ordinary skill in the art, when combining two references that both disclose gaps, would somehow find it necessary to produce a gapless product. Accordingly, the appellant's argument requires an improper assumption that the artisan possesses less than ordinary skill.

The appellant argues that modifying Parasin to have abutting upper surfaces in view of Finkell while maintaining the Parasin gaps requires hindsight reconstruction. This is not persuasive. As detailed in the rejections above, the examiner's combination of Parasin and Finkell takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such that the reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

#### Regarding claim 15

The appellant argues that the Parasin second equalizing cavity (lower 42, 44 and 46) does not extend to the bottom surface of board (11). This is not persuasive. As seen in figure 2 of Parasin, the equalizing cavity (lower 42, 44, 46) extends to the bottom surface of board (11).

The appellant argues that the Parasin second equalizing cavity (lower 42, 44 and 46) is not formed by a gap between the proximal end of the groove and the distal end of the tongue.

This is not persuasive. As seen in figure 2 of Parasin, the second equalizing cavity (lower 42, 44 and 46) is formed by a gap (at 42) between the proximal end (32) of the groove (32, 35, 37) and the distal end (16) of the tongue (16, 20, 24). The examiner concedes that the second equalizing cavity is additionally formed in part by additional portions of the tongue and groove. However, the applicant's claims do no specifically forbid such additional forming structure. Lastly, the examiner notes the appellant has stated on record that claimed positional limitations are meant to be interpreted very broadly (see page 11 of appellant's appeal brief regarding how broadly the applicant intends the positional limitation "below" to be interpreted).

#### Regarding claim 17

The appellant argues that Parasin elements (top17, bottom 17) are not guiding wedges since they do not contact groove (14). This is not persuasive. Elements (top 17 and bottom 17) are guiding wedges in that they are "wedge shaped; a piece of a substance that tapers to a thin edge; something wedge-shaped" in accordance with Merriam-Webster's Collegiate Dictionary Tenth Edition. Furthermore, Parasin's guiding wedges (top 17, bottom 17) contact the inner surface of the groove (32, 35, 37) where the tips of the guiding wedges (top 17, bottom 17) meet surface (33). Note that groove (32, 35, 37) comprises surface (33) and surface (34) among others.

#### Regarding claims 18 and 23

The appellant argues that Parasin does not disclose "a hole, in fluid communication with said gap, said hole having an opening below said groove". This is not persuasive. Parasin

discloses a gap (lower gap between 10 and 11 through 42 up to, but not including, 44) therebetween; and a hole (bottom 44, bottom 46), in fluid communication (col.3, ll.15-20) with the gap, the hole having an opening (opening at bottom of bottom 46) below the groove (in as much as the applicant's hole 7 is below groove 1 as seen in figures 7 and 8). Also see the applicant's comments regarding the extremely broad manner in which the limitation "bellow" is to be interpreted (page 11 of the Appeal Brief filed on 6/8/2006).

The appellant argues that element (46) of Parasin cannot be both the "gap" and the "hole" at the same time. This is not persuasive. The examiner has relied upon element (bottom 44, bottom 46) to be the "hole" and element (lower gap between 10 and 11 extending through 42 up to, but not including, 44) to be the "gap".

The appellant argues that modifying the Parasin upper surfaces to abut as taught by Finkell would destroy the Parasin spaces. As already discussed above regarding claims14, 15 and 17; this argument is unpersuasive since both references disclose spaces underneath the upper surfaces and neither suggests removal or destruction of spaces, not even under the condition of abutting upper surfaces as taught by Parasin.

#### Regarding claim 23

The appellant argues that Parasin does not disclose the step of directing the glue "away form said upper surface and towards the lower surface of said boards". This is not persuasive. Parasin states (col.3, ll.15-20) "When assembling joints, glue may be applied to the tongue and groove profiles, the application of glue is optional. The spaces 42 between the tongue head and the groove head chamfered surfaces define a gap to accommodate excess glue". Note that

applying glue to the Parasin joint prior to assembly inherently requires that the glue is squeezed out from between surfaces (18) and (34) to flow (or be directed) into gaps (42, 44, 46), for which bottom gaps (42, 44, 46) thereby direct "the glue away from the upper surface and towards the lower surface of the boards" as claimed. Note that the limitation "towards the lower surface" does not necessarily require that the glue actually reach the bottom surface but rather only that the glue travel in a direction pointed down "towards" the bottom surface. The examiner further notes that even if the glue is applied after connection of the boards, the glue that would be injected from the upper surface to fill element (upper 42) would also inherently have to travel away from the upper surface and "towards" the bottom surface. The applicant has failed to detail any other possible manner of glue application that would fill elements (42) as disclosed by Parisin (col.3, Il.15-20) without meeting the applicant's claim limitations.

## Regarding claim 19

The appellant argues that element (46) of Parasin does not extend from the joint towards a proximal section of the first and second board. This is not persuasive. Parasin discloses that the hole (bottom 44, bottom 46) extends from the joint towards a proximal section (section of first and second board proximal to the bottom surface) of the first and second board.

#### Regarding claim 20

The appellant argues that modification of Parasin by Finkell requires destruction of Parasin's element (upper 46) such that the hole cannot extend to the lower surface. This is not persuasive for two reasons: first, as explained above with regard to claims14, 15 and 17,

modification of Parasin in view of Finkell does not require destruction of Parasin's element (upper 46); second, the examiner relies upon element (lower 44, lower 46), not element (upper 46), to be the hole of claims 19 and 20.

#### Regarding claim 21

The appellant argues that the Parasin hole (lower 46) is not a "vent" since it does not extend "through one of the boards". This is not persuasive. The Parasin hole (lower 44, lower 46) is a vent that traverses through (between the upper and lower surfaces) a portion of board (10) and thereby goes "through" one of the boards in as much as the applicant's own invention is. Note that the applicant's own vent (7), as seen in applicant's figures 7 and 8, does not traverse an entire thickness of a board but merely a portion of the board.

#### Regarding claim 22

The appellant argues that the Parasin vent does not have a terminal end at the lower surface of the board. This is not persuasive. Parasin discloses that the vent (lower 44, lower 46) has a terminal end (bottom end of 46) at the lower surface of the board.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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